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BY THE U.S GENERAL ACCOUNTING OFFICE

Report To The Chairman, Committee On Armed Services, United States Senate

COMPLETED

The Military Services Sole-Source Procurement Of C-12 Aircraft

In 1974 the Army and Air Force, in response to guidance from the Senate and House Committees on Armed Services, procured a common, light utility aircraft to meet their requirements. The Army, as the designated procurement agent, has purchased 222 C-12 aircraft at a cost of $212 million from 1974 through 1984. Those procurements were sole-source from Beech Aircraft Corporation. In 1983 the Air Force, with congressional approval, competitively leased 40 C-12s from Beech.

The Army, using standardization to justify sole-source purchases, has not determined the current costs and benefits of standardization versus competition. Several factors indicate that cited benefits of continued standardization may not be applicable and may be outweighed by the benefits of competition.

The Army, Navy, and Air Force plan to acquire additional C-12 type aircraft. GAO believes that the Secretary of Defense should, after validating requirements for these aircraft, direct that future procurements be competed unless it can be clearly shown that sole-source purchases are warranted.

GAO/NSIAD-85-80
MAY 15, 1985

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WASHINGTON, D.C. 20548

NATIONAL SECURITY AND
INTERNATIONAL AFFAIRS DIVISION

B-218757

The Honorable Barry Goldwater
Chairman, Committee on Armed
Services
United States Senate

Dear Mr. Chairman:

This report is in response to your February 1, 1985, letter requesting us to review the acquisition strategy for the C-12 aircraft. The C-12, a light, twin engine, fixed wing aircraft capable of transporting up to 8 passengers and/or light cargo, is used for peacetime administrative support. The Army, the designated C-12 procurement agent for the services, has purchased 222 of these aircraft beginning in 1974 through fiscal year 1984 at a cost of about $212 million. Of these aircraft, 114 were for the Army, 42 for the Air Force, and 66 for the Navy. In 1983, the Air Force entered into a lease/buy agreement for 40 C-12s.

All C-12s have been procured from Beech Aircraft Corporation. The initial 1974 contract for 34 C-12s was negotiated on a sole-source basis. The contract was negotiated following a competitive solicitation in which only Beech submitted a proposal. Subsequent acquisitions, except for the 1983 Air Force lease, have been negotiated on a sole-source basis with Beech.

The Army plans to procure an additional 273 C-12s, with 69 to be bought by the end of fiscal year 1990. The Air Force will decide by 1987 whether to (1) continue leasing the 40 C-12s, (2) purchase the leased aircraft, or (3) solicit new proposals to meet its requirements. The Navy has asked the Army to procure 12 C-12s in fiscal year 1985.

The Army, in making sole-source procurements of C-12 aircraft, has complied with recurring congressional guidance to acquire a single, common utility, transport aircraft. Subsequent sole-source procurements, while carrying out congressional guidance, have not been supported by adequate cost benefit analysis. Several factors indicate that the cited benefits of the services' sole-source justification of standardization may no longer be applicable or may be outweighed by benefits of competition. The Competition in Contracting Act of 1984 requires competitive procurements unless a noncompetitive award is clearly justified by the agency.

The results of our work are summarized below. A detailed response to each of the specific issues you asked us to examine is provided in appendix I. To supplement and add perspective to our response, we have included, as appendix II, a historical chronology of events surrounding C-12 procurements. Also, appendix III shows selected C-12 modifications, appendix IV compares the C-12 with similar aircraft, and appendix V is a picture of the Beech C-12 aircraft.

OBJECTIVES, SCOPE, AND METHODOLOGY

Your letter specifically asked us to:

--Review the competitive C-12 proposals to determine if the winner was properly selected.

--Determine whether there is sufficient justification for sole-source C-12 purchases.

--Determine if a new aircraft would require the establishment of a new logistics system.

--Evaluate future mission requirements and identify aircraft which could meet those requirements.

--Identify the opportunities for competition if savings appear indicated.

In meetings with your office on February 22, 1985, and April 18, 1985, we were told your primary interest was in determining whether there is sufficient justification for continued sole-source purchases of the C-12 aircraft.

In conducting our work, we reviewed records, documents, and files relating to the military services' procurement, maintenance, and operation of the C-12 aircraft and interviewed procurement, operations, and management officials at the Army Aviation Systems Command, St. Louis, Missouri; Air Force Systems Command, Aeronautical Systems Division, Wright-Patterson Air Force Base, Dayton, Ohio; and Naval Air Systems Command, Washington, D.C. We also interviewed and collected data from officials of Beech, Cessna, Fairchild, and Piper aircraft corporations and collected light aircraft procurement data from three civil agencies.

We began work in mid-February 1985 with a commitment to provide a report by May 15, 1985. The views of directly responsible officials were sought during the course of our work and are incorporated in the report where appropriate. However, to expedite issuance of this report, we did not ask the Department of Defense (DOD) or the individual services to

comment officially on this report. We conducted our work in accordance with generally accepted government auditing standards.

COMPETITIVE PROCUREMENT PROCEDURES CONFORM WITH REGULATIONS

Three competitive solicitations have been issued for the procurement of the C-12. The 1972 solicitation, in which several proposals were received and evaluated, was cancelled prior to award. The Secretary of the Army cancelled the solicitation primarily because requirements for the selected aircraft had not been completely justified to the Congress. The second competitive solicitation, issued in 1974, was cancelled when only Beech Aircraft Corporation submitted a proposal. A sole-source contract was subsequently negotiated with Beech. The third was the 1983 Air Force solicitation which resulted in four technically acceptable turboprop proposals and an award to Beech for the lease of 40 aircraft.

In 1974 a bid protest was filed regarding the first two competitive solicitations and the subsequent sole-source award to Beech. In a decision on the protest, we did not object to the 1972 cancellation because the protest with our office was not timely. We ruled that the cancellation of the 1974 solicitation and the subsequent sole-source award was in accordance with procurement regulations. The 1983 Air Force award was not protested to our office.

Our review of the three competitive solicitations, evaluations, and selections did not reveal any apparent violations of procurement regulations. We did not assess the judgemental decisions involved in evaluations of the trade-offs between performance, cost, and other factors. Because regulations give procuring agencies broad discretion in this area, further review would not be warranted without indications of arbitrary or unreasonable decisions by the agency.

STANDARDIZATION JUSTIFICATION NOT ADEQUATELY SUPPORTED

In the early 1970s, the Army and Air Force sought separate congressional authorization to procure light utility aircraft. The Senate and House Committees on Armed Services recommended that the services jointly procure a single aircraft suitable for the needs of both. Congressional guidance cited savings and benefits of standardization and consolidation of purchases as the basis for establishing a single, common aircraft

requirement. Following the initial C-12 procurement in 1974, the Army generally cited the "standardization" exception to formal advertising in negotiating sole-source procurements with Beech. Under this exception, a contract for technical equipment could be negotiated when standardization and interchangeability are determined necessary in the public interest. The recently enacted Competition in Contracting Act, which governs all solicitations issued after April 1, 1985, eliminates the exceptions and requires free and open competition unless one of seven noncompetitive circumstances is justified. The amended Federal Acquisition Regulation implementing the act recognizes standardization, if clearly justified by the agency, as a basis for noncompetitive award.

The Army, in sole-source purchases since 1975, has not performed a cost-benefit analysis to determine and quantify (1) the potential savings and benefits of competing future requirements, (2) the cost of competing C-12 type aircraft, and (3) the savings and benefits of continued sole-source C-12 purchases. We believe that without such information, the continued use of standardization to justify sole-source C-12 procurements is not adequately supported.

Officials in the services believe that C-12 type requirements could be competed but point out congressional guidance to procure a common light utility aircraft. Service officials noted that the C-12 is not considered a high priority budget item and that sporadic annual funding and purchases of small quantities of aircraft spread over a number of years could reduce the benefits of competition. Aircraft company officials said that small competitive purchases may not provide sufficient incentive to establish and/or operate a maintenance and logistics support system for a few aircraft.

CONTRACTOR LOGISTICS SUPPORT DIMINISHES STANDARDIZATION JUSTIFICATION

Reasons included in C-12 sole-source justifications for standardization are to (1) assure the readiness, maintainability, and reliability of equipment, (2) materially reduce the quantity of spares and repair parts required to be carried, (3) prevent duplication of cost for contractor facilities, and (4) make possible the interchange of parts of damaged equipment. These factors could be substantially achieved through a consolidated competitive procurement that included full contractor provided maintenance and logistics support and contract provisions to ensure required readiness, maintainability, and reliability levels. Army C-12 project officials pointed out, however, that basing uncommon aircraft at the same location may result in some duplication of ground support equipment and contractor facilities.

Beech Aerospace Services, Incorporated, a wholly owned subsidiary of Beech, currently provides maintenance and logistics support services for all the C-12s. Several companies that make C-12 type aircraft can and do provide full logistics support for their aircraft. As part of the Navy's efforts to maximize competition, it is planning to compete maintenance and logistics support services for its C-12s.

INCREASED COMPETITION FOR C-12 TYPE AIRCRAFT

The competitive market for C-12 type aircraft has changed significantly since 1974 when only Beech submitted a proposal. Several U.S. aircraft manufacturers, including Beech, now make a C-12 type light turboprop aircraft that could meet the services utility aircraft requirements. This was demonstrated in the 1983 Air Force competition to lease 40 C-12 type aircraft. Four U.S. aircraft manufacturers submitted proposals for turboprops. All proposals were determined to meet the performance requirements and each proposal for aircraft maintenance and support was rated either acceptable or exceptional. Beech Aircraft Corporation, which had the lowest total cost proposal, was awarded the lease.

Appendix IV summarizes performance characteristics of some comparable light utility aircraft, including three of the aircraft that competed for the Air Force lease.

In addition to the increase in competitive aircraft, a major decline in commercial aircraft sales has made market conditions for competition favorable. The General Aviation Manufacturers Association reports that light aircraft sales declined from a peak of 17,800 units in 1978 to 2,700 in 1983. Association officials attribute this primarily to the recession and high interest rates. In interviews, several aircraft manufacturers indicated a strong interest in competing for C-12 requirements. We found indications of potential price savings resulting from competition in reviewing several recent civil agency competitive procurements of light aircraft. Several competitive proposals were received and significant price differences existed between the high and low offerors.

PERFORMANCE CHANGES AND MODIFICATIONS WEAKEN STANDARDIZATION

Changes in performance requirements along with changes and modifications to the C-12 aircraft raise questions regarding standardization as a basis for continued sole-source procurements. Since initial purchases in 1974, the C-12 has been

through several model changes from the original C-12A to the current C-12D and F models. These changes have included engines, avionics, and wing design. Appendix III lists selected changes and modifications to the C-12 since 1974. Changes in the services' C-12 performance requirements have included increased speeds and cruise ceilings and reduced takeoff and landing distances. To the extent such changes reduce interchangeability, the basis for standardization is weakened.

STUDIES RAISE QUESTIONS AS TO FUTURE REQUIREMENTS

The Army, to meet its own requirements, plans to buy 273 additional C-12 type aircraft with 69 to be purchased by 1990. The Air Force will make its C-12 lease/buy decision by 1987. Also the Navy has plans to procure a medium size operational support aircraft. However, an April 19, 1985, DOD Inspector General report raises questions regarding the services requirements and use of operational support aircraft, including the C-12. The report concluded that operational support aircraft wartime requirements are not clearly defined or documented to support the number and mix of aircraft. A 1982 Defense Audit Service report cited abuses and an undisciplined manner in which such aircraft are used. A reason identified for this was the services view that use of such aircraft is considered "cost free" because the flying time was required for pilot training.

CONCLUSIONS AND RECOMMENDATION

We believe that the basis and support for the original standardization justification has eroded and the savings and benefits of standardization may not outweigh the potential benefits of competition. Since the original 1974 award in which only Beech submitted a proposal, (1) the prospects for meaningful competition for C-12 type aircraft have increased significantly, (2) the services performance requirements for C-12 aircraft have increased, and (3) the Beech C-12 has undergone modifications and model changes. Also, a competitive procurement in which the contractor provides full maintenance and logistics support would eliminate much of the basis used to justify standardization.

Greater competition could be obtained for C-12 type aircraft procurements if future requirements are consolidated. This would prevent the proliferation of light utility aircraft and give contractors adequate incentive to expand maintenance and logistic support systems. However, questions raised in recent DOD audit reports regarding operational support aircraft requirements and use should be resolved before further C-12 acquisitions are made.

We recommend that the Secretary of Defense, after validating future requirements for C-12 type aircraft, direct that future procurements be competed unless it can be clearly shown that continuing the present sole-source acquisition strategy is warranted under the provisions of the 1984 Competition in Contracting Act.

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As requested by your office, we plan no further distribution of this report until 30 days from the date on this report, unless you publicly announce its contents earlier. At that time, unless an extension is requested, we will send copies to the Secretary of Defense and the Secretaries of the Army, Navy, and Air Force.

Sincerely yours,

Frank C. Conahan

Frank C. Conahan
Director

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ABBREVIATIONS

ASPR	Armed Services Procurement Regulation
DOD	Department of Defense
D&F	determination and findings
GAO	General Accounting Office
OSA	Operational Support Aircraft
RFP	request for proposal

DETAILED RESPONSES TO C-12

ACQUISITION ISSUES

REVIEW COMPETITIVE C-12 PROPOSALS TO DETERMINE IF THE WINNER WAS PROPERLY SELECTED

There have been three competitive solicitations during the procurement history of the C-12 aircraft. The first request for proposal (RFP) dated October 6, 1972, resulted in proposals from Cessna, Gates Learjet, Swearingen, and Beech aircraft companies. The Source Selection Authority, based on the evaluation criteria in the solicitation, selected the Cessna proposal. The evaluation criteria in order of importance were (1) ability of proposed aircraft to meet the technical and operational requirements, (2) ability of the offeror to provide and manage the required logistics support, (3) the total cost to the government, and (4) the offeror's proposed delivery schedule. The Authority stated that (1) Cessna was the most cost effective aircraft proposed below the government target cost of $600,000 and over the required range of 1,000 nautical miles, (2) Cessna's fanjet engines had the best flying qualities and crew station design, (3) Cessna had significant safety advantages and handling ease with one engine inoperative, and (4) Cessna's logistical plan was the best offered.

This competitive solicitation was cancelled by the Secretary of the Army because (1) the Cessna aircraft was a jet whereas the Army had represented to the Congress that it intended to procure a turboprop type aircraft, (2) the Army had not completely justified its requirements for a jet aircraft, and (3) information about the Source Selection Authority's evaluation and ranking of the proposals was known in several quarters.

On March 25, 1974, Cessna protested, among other things, the cancellation of the first competitive RFP. The protest was dismissed because it was not filed within the time required.

The second competitive solicitation for C-12 aircraft was issued on March 15, 1974. This solicitation, unlike the first, specified a turboprop aircraft. Eight companies were solicited but only Beech submitted a proposal. This resulted in the Army cancelling this solicitation and negotiating a sole-source contract with Beech. As part of its March 1974 protest, Cessna also alleged that the specifications for the second RFP were drafted so that only one aircraft could qualify and that sole-source award to Beech was contrary to congressional guidance. On August 12, 1974, we ruled that Cessna's allegation

of restrictive specification was not substantiated because the decision to limit procurement to turboprops represented the services' considered judgement of its minimum needs and at least two offers were anticipated in response to the solicitation. The sole-source award to Beech was undertaken in accordance with pertinent procurement regulations and there was no congressional objection to the sole-source award.

The third competitive solicitation involving the C-12 aircraft was the 1983 Air Force program to replace the small executive jets, CT-39 Operational Support Aircraft (OSA) fleet, with leased, off-the-shelf, business aircraft certified by the Federal Aviation Administration. The RFP called for 80 turbofan aircraft to meet longer distance requirements and 40 turbofan or turboprop aircraft for shorter distances. Performance requirements differentiated the two types of aircraft. The Air Force received proposals from six companies. Proposals for the turbofan were received from Cessna Aircraft Company and Gates Learjet Corporation. Proposals for the turbofan or turboprop were received from Beech, Fairchild, Gulfstream, Piper, and Cessna aircraft companies. The RFP required that the successful offeror had to be the manufacturer of the aircraft proposed, and provide full contractor logistics support for the period of the lease. The offerors were told that the selection would be based on an integrated assessment of both the aircraft lease and logistics support proposals. The offerors were also told that subjective judgement in the government's assessment is implicit in the evaluation process. The RFP listed the following evaluation criteria for all proposals in descending order of importance:

--operational utility/technical,

--logistics and maintenance support/program adequacy, and

--cost/price.

The Source Selection Board did not assign weight to or quantify these three criteria in evaluating the proposals.

In the evaluation the Board considered (1) past performance on similar contracts, (2) understanding of mission, purpose, and intended use, (3) overall technical, business, engineering, and manufacturing soundness, and (4) risks involved with the long-term lease and logistics support programs. The Board's evaluation showed that all five proposals submitted were either acceptable or exceptional in the operational utility/technical and logistical and maintenance areas. It also showed that on a total cost basis (lease, contractor logistics support, fuel, and training costs) the Beech proposal was the lowest. The Secretary of the Air Force, based on the Board's evaluation of

proposals, selected the winners. Gates Learjet was awarded a lease for 80 turbofans designated the C-21A, and Beech was awarded a lease for 40 turboprops designated the C-12F. This award was not protested to our office.

Conclusions

Our review of the competitive solicitations, evaluations, and selections of these competitions did not reveal any apparent violations of procurement regulations or procedures. We did not assess the judgemental decisions involved in evaluations of the trade-offs between performance, costs, and other factors because regulations give procuring agencies broad discretion in this area. Further review would not be warranted without indications of arbitrary or unreasonable decisions by the agency.

DETERMINE WHETHER THERE IS SUFFICIENT JUSTIFICATION FOR SOLE-SOURCE C-12 PURCHASES

In the early 1970s the Army and Air Force sought separate congressional authorization to procure a light utility aircraft and an executive type aircraft, respectively. The Senate and House oversight committees directed the services to take steps to jointly procure a single aircraft suitable for both services' needs. Savings and benefits of standardization and consolidation of purchases were given as the basis for establishing a common aircraft requirement. The initial selection of a common aircraft was to be based on competition.

Consistent with this congressional guidance, the Army and the Air Force jointly attempted to competitively procure a common aircraft to fulfill their needs. However, the Army cancelled the 1974 competitive solicitation when only Beech responded and negotiated a sole-source contract with Beech. This contract was negotiated under the Armed Services Procurement Act exception to formal advertising, that it was impractical to obtain competition (10 U.S.C. § 2304(a) (10)).[1] Our August 12, 1974, decision on Cessna's protest of this award, concluded that the negotiation of a sole-source contract with Beech was proper because Beech was the only contractor to submit an acceptable technical proposal.

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[1]The law in effect at the time of this award expressed a preference for procurement by formal advertising over negotiation unless 1 of 17 statutory exceptions was justified. The recently enacted Competition in Contracting Act of 1984 eliminates the preference for formal advertising and its 17 exceptions justifying negotiation. The act emphasizes the use of competitive procurement procedures unless justified in one of seven noncompetitive circumstances.

Subsequent to the first sole-source award to Beech in August 1974, the Army and Beech modified the contract on November 26, 1974, to add options for 100 more C-12s. The modification provided options for the purchase of 20 C-12s in fiscal year 1976 with four 1-year options of 20 aircraft per year through fiscal year 1980. In this procurement the Army changed its contract negotiation authority from "impractical to obtain competition" to "standardization" (10 U.S.C. § 2304(a)(13)).[2] Under this latter provision a contract may be negotiated when it is for technical equipment whose standardization and interchangeability of parts are determined necessary in the public interest. The Army exercised these options and purchased 76 C-12s on a sole-source basis under this authority.

The Army modified the August 1974 contract a second time on December 20, 1977, adding the option to purchase 66 additional aircraft at a rate of 22 per year beginning in 1977. This modification was effected to fulfill an interdepartmental purchase request by the Navy for C-12 aircraft. This modification, like the initial sole-source award, cited impractical to obtain competition as authority to negotiate the contract. These options were also exercised and the Army purchased the aircraft on a sole-source basis from Beech. In March 1982, the Army awarded a sole-source requirements type contract to Beech for up to 121 aircraft. This contract was also negotiated sole-source based on the standardization authority. The Army justification for a planned 1985 sole-source procurement of C-12s also cites the standardization authority.

When a procuring agency negotiates a contract on a sole-source basis, it is required to provide a written justification for the award. In some cases the sole-source justification is part of the determination and findings (D&F) permitting negotiations; frequently, it is a separate statement. The justification should adequately document why a sole-source procurement is necessary. In the case of the C-12, the justification for the two contract modifications adding 166 aircraft and the 1982 requirements contract were essentially the same. Three of the four D&Fs dated April 22, 1975; September 19, 1980; and September 12, 1984, stated that procurement negotiation without formal advertising was necessary because standardization of this equipment (aircraft) and interchangeability of its parts are necessary in the public

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[2]The Federal Acquisition Regulation implementing the Competition in Contracting Act recognizes standardization, if clearly justified by the agency, as a basis for noncompetitive award.

interest generally to (1) assure the readiness, maintainability and reliability of the equipment, (2) prevent duplication of costs for separate contractor support facilities and stockage of a wide range of parts for dissimilar aircraft, and (3) make possible the interchange of parts among pieces of damaged equipment.

The fourth D&F, dated December 16, 1977, indicated that the option for the 66 aircraft for the Navy was negotiated on a sole-source basis because it was impractical to obtain competition. However, the sole-source justification was predicated on the Navy's decision to obtain an aircraft that was previously purchased and in use by the Army and Air Force so that it (the Navy) could share the common contractor support already established for the other services. In other words, this sole-source award was justified on the grounds that the Navy needed an aircraft that was compatible and interchangeable with existing aircraft. Thus, while the Navy purchase was negotiated under a different statutory authority, the sole-source justification was related to the standardization authority relied upon for the other C-12 acquisitions.

The procurement regulations have required the procuring agency to consider certain factors before using the standardization justification to purchase specific make or model items. In considering these factors, the Army stated that the cost savings from standardization would exceed the expected cost savings which would be obtained through unrestricted competition, and that no new requirement existed for significant design change which would negate the benefits of standardization.

In addition to the sole-source justifications discussed above, the service officials stated that congressional guidance to buy a common aircraft was a major determining factor in standardizing the C-12. Service officials also indicated that congressional guidance to purchase a common aircraft already in the inventory was also a determining factor in later sole-source decisions.

Current basis for standardization questionable

Our evaluation of the market conditions and justifications supporting sole-source procurements showed that conditions for establishing the C-12 as a standard aircraft in 1975 were not the most favorable and since then the basis and support of the standardization sole-source justifications have eroded. More specifically we found (1) a competitive market which was limited at the time of initial contract but more competitive now, (2) changing C-12 performance requirements which may diminish

standardization, and (3) a current standardization justification that is not fully supported.

Limited competitive market at time of initial contract

The selection of the Beech C-12 as the common light utility aircraft was based on a limited competitive market. Beech was the only company that responded to the 1974 RFP and was subsequently awarded a sole-source contract for the C-12. Also indicative of market conditions is the fact that the Beech proposal would not have been acceptable had the Army not amended a solicitation requirement that the proposed aircraft and all subassemblies and parts be designed in the United States. If the solicitation had not been amended, Beech's proposed aircraft with Pratt and Whitney engines, which were Canadian designed and made, would not have been acceptable.

The Army, after issuing the March 15, 1974, RFP for 34 turboprop aircraft with an option for 16 additional aircraft, established an additional requirement for 100 more aircraft on May 17, 1974. However, the prospective bidders were not notified that additional procurements were planned. Furthermore, the March 15, 1974, RFP did not contain the Armed Services Procurement Regulation (ASPR) "Notice of Possible Standardization" clause to alert potential bidders that future procurement requirements might be based on the established "standard" aircraft. We do not know whether including the additional quantity or the clause would have increased the competition.

The competitive market for C-12 type aircraft has changed significantly since 1974. There are several U.S. aircraft manufacturers that now make light turboprop aircraft that can meet the services' utility aircraft requirements. Several makes and models now on the market were not available in 1974. The ability of these aircraft to meet the services' C-12 requirements was demonstrated in the 1983 Air Force competitive lease in which all four turboprop proposals were determined acceptable. Also, a decline in sales of commercial light aircraft in recent years, according to industry officials, has created an extremely competitive buyers market. The General Aviation Manufacturers Association reports that light aircraft sales have declined from 17,800 units in 1978 to 2,700 in 1983. According to Association officials the industry has suffered from the effects of the recession and high interest rates. Even with an improving economy the industry is operating at only 20 to 25 percent of capacity.

Changing service requirements diminish continuing standardization

The Beech C-12 has undergone significant modifications and model changes since 1974. These have included changes in engines, wing design, and avionics. The cumulative impact of these changes could weaken the basis for standardization by reducing the interchangeability of components.

Aircraft requirements have changed significantly since 1974. A comparison of the aircraft operating specifications shows that six of the eight requirements were more demanding in the 1982 contract than in the 1974 contract. The differences include:

--Increasing twin engine cruise ceiling by 9,000 feet to 29,000 feet.

--Increasing cruise speed from 210 to 221 knots.

--Increasing single engine service ceiling by 3,100 feet to 16,600 feet.

--Reducing the maximum gross weight takeoff distance to clear a 50-foot obstacle from 3,000 feet to 2,600 feet.

--Reducing the landing distance at maximum gross weight over a 50-foot obstacle from 3,000 feet to 2,000 feet.

--Increasing the single engine climb gradient at 5,000 feet by 1.6 percent from 2.4 percent.

Standardization justification not fully supported

The standardization sole-source justifications for C-12 procurement are not fully supported. Reasons included in C-12 justifications are to (1) assure the readiness, maintainability, and reliability of equipment, (2) materially reduce the quantity of spares and repair parts required to be carried, (3) prevent duplication of cost for contractor facilities, and (4) make possible the interchange of parts of damaged equipment. Army C-12 project officials stated that these factors could be substantially achieved through a competitive total package procurement that includes contractor-provided maintenance and logistic support and contract provisions to ensure required readiness, maintainability, and reliability levels. They point out, however, that basing uncommon aircraft at the same location

could result in some duplication of ground support equipment and contractor facilities.

The justifications also state that cost savings from standardization will exceed the expected cost savings from unrestricted competition; however, it is not substantiated by any recent analysis. According to an Army C-12 procurement official, such statements are based on a 1975 price comparison of Swearingen aircraft and that study showed only a marginal benefit.

Although the market is now more competitive, the Army has not performed a cost-benefit analysis to determine and quantify (1) the potential savings and benefits of competing future C-12 requirements, (2) the cost of competing the C-12, and (3) the savings and benefits of continued sole-source purchases.

Cost of competition not determined

Army C-12 project officials point out that competing the C-12 requirements may not be desirable because of the added cost of (1) administrative procedures for soliciting and awarding a new competitive contract, (2) new technical manuals, (3) new aircraft performance testing requirements, and (4) duplicative ground support equipment and contractor facilities if uncommon aircraft are based together. Project officials also point out that the C-12 is a proven high quality aircraft and that Beech's maintenance and logistical support of the aircraft results in a high (90 percent) operational readiness rate. However, C-12 project officials stated that no one has quantified the added cost of competing nor performed any detailed cost-benefit analysis showing the opportunities and potential savings from competition.

The Air Force competed its lease/buy requirements in 1983 for a C-12 type aircraft. Air Force officials said that a sole-source acquisition was not considered because (1) competition was proper and required no justification, (2) no savings would result from a sole-source procurement, and (3) more than one contractor could fulfill the requirement. The Navy Competition Advocate stated that C-12 type aircraft could and should be competed.

Conclusions

We believe that continued sole-source procurement of C-12 aircraft, based on standardization, is not adequately supported. However, the Army, in making sole-source C-12 procurements, has complied with congressional recurring guidance

to acquire a single, common utility, transport aircraft. Several factors indicate that the cited benefits of standardization may not be applicable or may be outweighed by the benefits of competition.

A competitive contract that (1)consolidates future C-12 type aircraft requirements (2) includes full contractor provided maintenance and logistics support, and (3) includes provisions to ensure required aircraft readiness, maintainability, and reliability levels could achieve many of the benefits used to justify standardization.

DETERMINE IF A NEW AIRCRAFT WOULD REQUIRE THE ESTABLISHMENT OF A NEW LOGISTICS SYSTEM

Maintenance and logistics support for all C-12s currently in the inventory are contracted out to Beech Aerospace Services, Incorporated, a wholly owned subsidiary of Beech. Under this arrangement, the contractor provides personnel, parts, equipment, and facilities to maintain and repair C-12 aircraft at deployed locations throughout the world. Beech Aerospace Services owns and operates a central depot maintenance and parts supply facility and a parts distribution system. The contract requires a minimum average of 80 percent operational readiness rate for each C-12 aircraft. Failure to maintain the rate results in financial penalties. In fiscal year 1985, the contractor was achieving an operational readiness rate in excess of 90 percent for the C-12s.

A C-12 competitive procurement could result in a new aircraft being introduced to the services' inventories. But a new aircraft would not require the services to establish a new logistics system if maintenance and logistics support are contracted out. If the services provided maintenance and logistics support in-house, there could be added costs of logistically supporting different makes of similar aircraft. The services state that they plan to continue contracting out maintenance and logistics support for C-12 type aircraft. The Navy is planning to compete its C-12 support services, either jointly with the other services or alone, as appropriate, beginning in fiscal year 1986.

Officials of Cessna, Piper, and Fairchild aircraft companies stated that their companies were willing and able to provide full maintenance and logistics support for any C-12 type aircraft purchased by the services from them. As pointed out by one official, the competitive proposals in the 1983 Air Force lease/buy of 40 C-12s included provisions for providing full maintenance and logistics support. Each company's proposal was determined acceptable by the Air Force Source Selection Board. Several officials pointed out current examples of their company

providing maintenance and logistics support for customer's aircraft.

Conclusion

We believe that a competitive procurement of C-12 type aircraft that includes full contractor-provided maintenance and logistics support, as currently provided, would not require the establishment of a new logistics system. A contractor could provide personnel, parts, equipment, and facilities to maintain the C-12 type aircraft.

EVALUATE FUTURE MISSION REQUIREMENTS AND IDENTIFY AIRCRAFT WHICH WOULD MEET REQUIREMENTS

Each of the services plan to purchase or lease operational support aircraft during the next 5 years. The Army's own future requirement is for 273 additional C-12 type aircraft, and it plans to purchase 69 of these during the next 5 years. Army C-12 project officials stated that several U.S. aircraft companies make a turboprop aircraft that could meet their light utility aircraft requirements.

The Navy plans to purchase 12 C-12s in fiscal year 1985, and has requested the Army to make the purchase. Navy officials told us that the C-12 purchase should be competed because other U.S. companies make aircraft that could meet the Navy's requirements. The Navy in March 1985 cancelled its plans to purchase 12 C-12s in 1986 and 12 in 1987. The Navy is currently developing a requirement for medium size operational support aircraft. The Navy Competition Advocate General stated that the Navy plans to compete any aircraft procured to meet future requirements.

The Air Force lease of 40 C-12 aircraft will start to expire in 1989. The Air Force must decide by 1987 whether to (1) continue leasing under a 3 year option, (2) buy the aircraft, or (3) recompete. The Air National Guard also has future requirements for C-12s.

There are several U.S. aircraft manufacturers that make a C-12 type light turboprop aircraft that could meet the services utility aircraft requirements. This was demonstrated when four U.S. aircraft manufacturers submitted competitive turboprop proposals in the 1983 Air Force lease of C-12 type aircraft. The Source Selection Board determined that all four aircraft met the performance requirements and each proposal for aircraft maintenance and support was rated either acceptable or exceptional. Beech Aircraft Corporation was awarded the lease.

(Performance characteristics of three aircraft that competed for the Air Force lease are shown in appendix IV.)

The Navy, in testifying before the Congress on its 1978 budget request for utility aircraft, stated that it planned to compete its utility aircraft requirements. The Navy stated that market conditions had changed since the Army and Air Force purchased the C-12s and that open competition would serve the public interest.

Basis and support for requirements not clearly defined

On April 19, 1985, the DOD Inspector General issued a report on his audit of operational support aircraft (OSA) requirements. The report, noting the longstanding DOD policy that OSA are primarily for peacetime administrative support, concluded that OSA wartime requirements are not clearly defined or documented to support the number, mix, and type of aircraft.

Army officials stated that there are no clearly defined wartime requirements for the C-12 aircraft and it has a low budget priority. Navy officials stated that their need for the 36 C-12s being requested was not documented. (The Navy, in March 1985, cancelled its plans to purchase 12 C-12s in fiscal years 1986 and 1987.) The Air Force has performed an analysis of its OSA wartime requirements and uses this analysis to support its requirements.

Army plans show requirements and procurement plans for 69 C-12 aircraft in fiscal years 1985 through 1990. In fiscal years 1978, 1979, and 1981 through 1984, the Army's final budget submissions did not include requests for C-12 funding. An Army official stated that they had requirements in each of those years but the purchases were deleted during the Army's budget review process in favor of higher priority projects. In fiscal years 1981, 1982, 1983, and 1984, the Congress authorized and appropriated funds for the procurement of six C-12s in each of these years.

A November 24, 1982, Defense Audit Service report on the use of operational support and special mission support airlift concluded that DOD continues to use such aircraft in a relatively undisciplined manner, particularly in terms of cost effectiveness. The audit service found that 37 percent of the flights were legs in which the aircraft was flying empty to the pick-up destination or from the discharge destination. The report also cited examples of flights to transport wives and dependents. In addition, numerous flights were made when commercially available flights would have cost much less. The report attributes the cause of such practices to management's

view that such flights are "no cost" because the flying time was required for pilot training.

We reviewed OSA usage data provided by each of the services. The Navy provided C-12 utilization data beginning in fiscal year 1981, the Air Force provided similar data for the period April 1984 to March 1985, and the Army furnished C-12 usage information for fiscal year 1984. Our review showed for the time periods covered, that transporting passengers to dispersed locations often required flying empty legs in a mission. Of the missions reported by each service, an average of 35 and 43 percent of the Navy's and Air Force's OSA mission legs, respectively, and 33 percent of the Army's available passenger miles were flown without duty passengers or scheduled cargo. For these portions of the missions, the aircraft were either flown empty or were transporting unscheduled passengers or cargo to take advantage of empty seats or space available.

The Navy averaged 3.8 passengers per leg and the Air Force averaged 3. Similar data for the Army was not readily available. Although a certain percentage of underutilization is unavoidable, the cost incurred while flying empty contributes to the expense of the mission. The services try to minimize the number of empty legs by transporting unscheduled passengers and cargo. We did not attempt to determine what percentage of the unscheduled passengers were on duty related travel. Less than 1 percent of the passengers were flown for priority 1 purposes (emergency airlift in direct support of operational forces or for life saving purposes), the remaining flights were divided among priorities 2 through 5, involving various forms of official business.

Conclusions

The services future requirements for C-12 type aircraft are substantial. There are a number of aircraft that can meet and compete for the requirements; however, there is reason for concern about the support and justification for stated future requirements.

IDENTIFY OPPORTUNITIES FOR COMPETITION IF SAVINGS APPEAR INDICATED

As indicated in the previous sections, the opportunities for competition are substantial given the stated future requirements for C-12 type aircraft and the number of aircraft available that can meet those requirements. Also as stated earlier, the Army has not performed a detailed analysis to determine and quantify (1) the potential savings and benefits of competition, (2) the cost of competition, and (3) the savings and benefits of standardization. To obtain an indication of

possible savings from competition, we examined six civil agency procurements for light transport aircraft made between November 1980 and February 1985. Four of the procurements were made by the Drug Enforcement Administration and one each by the U.S. Customs Service and the Federal Aviation Administration.

U.S. Customs Service

On February 28, 1985, Piper Aircraft Corporation, Lakeland, Florida, was awarded a firm-fixed-price contract for the purchase of eight Cheyenne IIIA aircraft. The Customs Service designated the required aircraft as "Trackers" and anticipated that its needs could be met by any number of general aviation, twin-engine, turboprop aircraft.

The procurement was formally advertised in the Commerce Business Daily and 19 firms requested the solicitation. Three firms--Cessna, Fairchild, and Piper--submitted proposals. The Customs Service determined that all the proposals were within the competitive range. Piper offered the lowest price, almost $6.4 million under the next lowest firm, Cessna. Piper was selected. The bids of each firm for the eight aircraft purchase were as follows:

Piper	$16,684,866
Fairchild	$25,409,840
Cessna	$23,077,024

Federal Aviation Administration

On November 4, 1980, Beech Aircraft Corporation, Wichita, Kansas, was awarded a lease/purchase fixed-price contract for the lease, with option to purchase, of four light, twin-engine, turboprop aircraft and associated equipment and service. The award provided for lease/purchase options for 5 additional years. The lease option has been exercised through fiscal year 1985.

Invitations for bids were issued to the potential suppliers and the following bids were received:

Cessna (Corsair 425)	$5,983,374
Beech	6,093,233
Piper	6,730,116
Cessna (Conquest 441)	6,903,144

The two Cessna bids and the Piper bid were found to be technically nonresponsive. The remaining bid, that of Beech, was found to be technically responsive and the price was considered fair and reasonable. Accordingly, the award was made to Beech.

Drug Enforcement Administration

On March 24, 1982, the Mercury Aviation Company, Richmond Heights, Ohio, was awarded a firm-fixed-price contract for the purchase of six Cessna Stationair 6 II, model year 1982 aircraft. The contract was formally advertised. Nine bids were timely received ranging from a high of $597,150 per aircraft to the successful low bid of $557,295.

On April 28, 1983, Del Rio Flying Service, Inc., of Del Rio, Texas, was awarded a firm-fixed-price contract for the purchase of six Cessna Stationair 6 II aircraft without avionics, model year 1983. The contract was formally advertised and eight timely bids were received, ranging from a high of $557,994 per aircraft to the successful low bid of $521,176.

On August 30, 1983, Piper Aircraft Corporation of Lakeland, Florida, was awarded a firm-fixed-price contract for the purchase of one Flyaway Cabin Class, twin engine, turbine powered, propeller driven, aircraft with an option to purchase five additional aircraft. Seven firms submitted proposals in response to a request for proposal. Two of the proposals were considered to contain defects which eliminated them from further consideration. Of the remaining five, the high cost proposal was $3,003,801 and the lowest, by Piper, was $2,094,988. Ensuing negotiations with Piper reduced the amount of its proposal to $1,994,950. Negotiations with two of the other firms which submitted proposals, Fairchild and Gulfstream, resulted in "best and final" offers in excess of the best and final offer of Piper. Fairchild's best offer was $2,100,000 and Gulfstream's best offer was $2,165,131. As a result of these negotiations, Piper was awarded the contract, its proposal being $105,050 lower than Fairchild's.

On June 6, 1984, Gulfstream Aerospace Corporation, Oklahoma City, Oklahoma, was awarded a firm-fixed-price contract for the purchase of four 1985 model cabin class, twin turbine engine, surveillance aircraft. Solicitations for bids were issued to 13 companies; timely responses were received from Gulfstream Aerospace, Cessna, Piper, and Fairchild. The bids ranged from $2,204,294 per aircraft from Fairchild to $1,587,950 per aircraft from Gulfstream.

Conclusion

Recent competitive procurements of general utility aircraft by the federal government indicate that there is a competitive market and that competition has produced savings.

C-12 PROCUREMENT HISTORY

Outlined below is a chronology of events surrounding C-12 aircraft procurements.

--The fiscal year 1973 Defense budget submission contained an Army request for 20 U-21F, twin engine, propeller driven, utility aircraft and an Air Force request for 14 executive type aircraft. The Army U-21F procurement was to replace older U-21 models in the Army's inventory. The initial U-21 contract was competitively awarded to Beech on September 30, 1966.

--During the fiscal year 1973 Defense budget deliberations, the House and Senate Committees on Armed Services noted the similarity of the Army and Air Force utility aircraft requirements. Therefore, the Committees directed a joint competitive purchase of a common aircraft and recommended that the Army be the procuring agent.

--On October 6, 1972, the Army issued a joint RFP for 40 Army and 30 Air Force utility aircraft with an option for 60 additional Army aircraft. The evaluation criteria in the order of importance were (1) the ability to meet technical and operational requirements, (2) the ability to provide and manage required logistics support, (3) the total cost to the government, and (4) the offeror's proposed delivery schedule.

--On January 16, 1973, after evaluating proposals from Beech, Cessna, Gates Learjet, and Swearingen, the Source Selection Authority selected the Cessna proposal. The Authority stated that Cessna's aircraft (1) was the most cost effective aircraft below the government target cost of $600,000 and over the required range of up to 1,000 nautical miles, (2) had the best flying qualities and crew station design, and (3) had significant safety advantages with excellent performance and handling ease with one engine inoperative. Also Cessna's logistical plan was considered the best offered.

--On January 29, 1973, the Secretary of the Army cancelled the solicitation and the pending award to Cessna. The Secretary's stated reasons for cancelling were (1) the Army had represented to the Congress that it intended to procure a turboprop type aircraft, (2) the Army had not completely justified its requirements for a jet aircraft, and (3) the information regarding the Source Selection Authority's evaluation and ranking of the offerors were known in several quarters.

--For about 12 months following the cancellation, the Army and Air Force attempted to reach agreement on specifications for a turboprop utility aircraft. The Army, while initially agreeing to the higher performance turbofan specification required by the Air Force, maintained that its minimum operational requirements could be met by a turboprop aircraft. Army and Air Force attempts to separate requirements into two purchases or to remove a "turboprop only" requirement from the proposed specification were not approved by the Chairman of the Senate Committee on Armed Services.

--In February 1974 the Secretary of the Army notified the Congress that the Army and Air Force had reexamined their utility aircraft requirements and determined a turboprop would meet all mission requirements and would save on fuel consumption. The Army stated it planned to solicit proposals for a two step formally advertised procurement and that competitive bids were expected from at least two manufacturers. The Chairman of the Senate Committee on Armed Services, noting the revised plan was consistent with the plan originally presented to and subsequently authorized by the Congress, did not object.

--On March 15, 1974, the Army solicited competitive proposals from eight companies; however, only Beech Aircraft submitted technical proposals. Therefore, the Army cancelled the solicitation and negotiated a sole-source contract with Beech for 34 Model A200 (C-12) aircraft with options for 16 more. The Model A200 had the highest performance capabilities and price of the four Beech proposals. The negotiated cost was under the established $600,000 price ceiling.

--On March 25, 1974, Cessna filed a bid protest with GAO. The Army withheld the award pending GAO's ruling on the protest. Cessna argued that (1) the cancellation of the 1972 RFP was invalid because the decision to cancel lacked a valid basis and was not made until the selection of Cessna, (2) the 1974 solicitation specifications were unduly restrictive and calculated to eliminate all but one offer, and (3) the noncompetitive award to Beech was contrary to congressional authorization.

--On August 12, 1974, GAO ruled that (1) Cessna's protest of the 1972 solicitation cancellation had not been filed within the time requirements, (2) Cessna's allegations of unduly restrictive specifications was not substantiated by the fact that only one technical offer was made, and (3) the allegation the procurement was contrary to the expressed intent of the Congress had no basis because the

sole-source negotiations with Beech were undertaken in accordance with ASPR and there was no congressional objection to the sole-source award.

--On November 26, 1974, 3 months after the first contract was signed, the Army modified the Beech contract adding options to purchase 100 additional C-12s. Justification for this sole-source procurement was that standardization and the resulting interchangeability of parts was necessary for the public interest. The Army said standardization was necessary to (1) assure the readiness, maintainability, and reliability of the equipment, (2) prevent duplication of costs for separate contractor facilities and stockage of a wide range of parts for dissimilar aircraft, and (3) make possible the interchange of parts among pieces of damaged equipment.

--On July 31 and August 15, 1975, the Army exercised the option under the 1974 Beech contract and purchased 16 C-12As for the Air Force and 20 for the Army, at a negotiated cost of $679,683 and $684,517, respectively. The $80,748 and $85,582 increases over the 1974 original contract were due partly to Army/Air Force required modifications. (See appendix III for selected C-12 modifications from 1974 to 1985.)

--On December 23, 1976, the Army exercised the contract option for the purchase of 20 C-12As at a negotiated cost of $799,741 each. The $200,806 per aircraft increase over the original 1974 contract was due to economic price adjustment for labor and material as specified in the contract and modifications to the aircraft. Increased labor costs amounted to $95,583 and increased material costs totaled $54,527. Modification costs for each aircraft totalled $50,696.

--On December 29, 1977, the Army exercised the contract option for the purchase of 20 C-12As aircraft at a negotiated cost of $812,317 per aircraft. The $213,382 per aircraft increase over the original 1974 base price was due to economic price adjustments for material and labor, as specified in the contract and aircraft modifications. However, the contractor reduced the original unit price from $598,935 to $597,835 because economic price adjustments calculated on the original base price resulted in a unit cost of $809,298 each. This was above the Army's established ceiling price of $800,865 per aircraft. Modifications to each aircraft totalled $12,952.

--The Navy's budget submission for fiscal year 1978 contained a request for 22 of a planned total requirement of 66 utility aircraft (CTX). At congressional hearings on the 1978 budget, Navy officials stated that they did not plan to buy the aircraft in common with the Army and Air Force because (1) the Navy required aircraft with slightly different performance features, (2) the advantages of purchasing aircraft common with the Army and Air Force were not as significant as might appear because the aircraft were to be fully maintained by the supplier, and (3) the market had changed since the Army and the Air Force purchases so that open competition would serve the public interest. The Navy testimony also indicated it expected five different companies to respond to its request for proposals.

--House and Senate Committees on Appropriations and Armed Services issued reports recommending and directing the Navy to procure an off-the-shelf, turboprop, light utility, aircraft which would be common with the Army/Air Force light utility transport.

--On June 7, 1977, the Secretary of the Navy, in response to a letter from the Chairman of the Senate Committee on Armed Services, stated that the Navy planned to use funds appropriated for the CTX to procure the latest version of the aircraft being used by the Army and Air Force.

--The congressional direction on the CTX procurement contained in the Senate Committee reports and floor debate did not appear in either the authorization or appropriations acts. Based on this, the Navy Deputy General Counsel informed the Secretary of the Navy that the Navy was free to compete for whatever aircraft would best meet its needs. He also stated, however, that only a noncompetitive procurement of the C-12 would meet the expressions of congressional intention.

--On October 31, 1977, the Secretary of the Navy, in a letter to the Chairmen of the Senate and House Committees on Appropriations and Armed Services and at least two other interested senators, said that "after careful evaluation of our requirements and all relevant factors including congressional guidance, it is the Navy's conclusion that it is in our best interest to acquire aircraft that is common with the Air Force and Army."

--On December 15, 1977, the Navy asked the Army to purchase aircraft through a modification of the August 13, 1974, contract with Beech. The Navy also requested that the Army/Air Force specifications be amended for the Navy aircraft.

--On December 29, 1977, the Army, after amending the 1974 contract to include 3 options for 22 aircraft each for the Navy, exercised the first option for 22 C-12s at a cost of $799,365 per aircraft.

--On December 29, 1977, the Secretary of Defense wrote Senator Goldwater that the sole-source purchase to achieve commonality was a reasonable business approach because (1) the C-12 provided a known and tested capability which satisfied the Navy's statement of requirements and could be delivered earlier than other alternatives, (2) procurement of the C-12 would also allow the Navy to share the common contractor support already established for the Army and Air Force, and (3) procurement price savings through competition might offset some of these advantages, but on balance there would be benefit from the procurement of a common aircraft.

--On February 21, 1978, Cessna filed suit against the Secretary of Defense and others alleging the sole-source contract between Navy and Beech was in violation of the ASPR. The court ruled on June 9, 1978, that Cessna failed to persuade the court that the official defendants acted without a rational basis or committed any "clear and prejudicial" violation of applicable statutes.

--On December 27, 1978, the Navy exercised its option for 22 C-12Bs at a cost of $869,371 per aircraft. The $70,000 per aircraft increase over the prior year purchase and the $270,436 increase over the original 1974 price was due primarily to inflation.

--On January 31, 1980, the Navy exercised its option for 22 C-12Bs at a cost of $1,130,414 per aircraft. The $531,479 increase over the 1974 aircraft cost was due to inflation.

--In April 1980, the Army exercised the 1974 contract option for 10 C-12D aircraft at a negotiated cost of $1,179,342 per aircraft. The $580,407 increase per aircraft over the original 1974 price was due primarily to economic price adjustments for labor amounting to $148,320 and materials totaling $235,919 (calculated on the new unit base price of $597,835 versus the old base price of $598,835). Also, included in this cost increase were the modifications which changed the aircraft from a C-12A to a C-12D. This increase totalled $19,727 per aircraft.

--On February 27, 1981, the Army purchased six C-12D aircraft at a negotiated cost of $1,429,224 per aircraft.

At the time of this buy, options for additional aircraft under the original contract had expired. This buy was made under a new secretarial D&F justifying sole-source procurement based on standardization.

--On March 26, 1982, the Army awarded a sole-source, firm-fixed-price requirements contract that had been negotiated with Beech for the procurement of 14 C-12D aircraft. Included in this contract were options for 3 additional years at a maximum of 6 aircraft per year. The justification for procurement by negotiation was that standardization of the equipment and interchangeability of parts was necessary in the public interest. The Army claimed standardization was necessary to (1) assure the readiness, maintainability, and reliability of the equipment, (2) prevent duplication of costs for separate contractor support facilities and stockage of a wide range of parts for dissimilar aircraft, and (3) make possible the interchange of parts among pieces of damaged equipment. Formal advertising was considered impracticable because procurement from another supplier would prevent equipment standardization and the interchange of parts.

--On July 26, 1982, the Cessna Aircraft Company submitted an unsolicited proposal to the Air Force to replace its small executive jets (CT-39) with leased jet aircraft. The proposal stated that leasing the Cessna aircraft would cost the Air Force less money than was allocated in fiscal year 1983 to cover the CT-39 operation and maintenance costs, and which presumably would continue to be programmed in future years. The Air Force Office of General Counsel, on August 6, 1982, concluded that Cessna could not be awarded a contract because sole-source awards based on unsolicited proposals are improper when the product offered is available through competition.

--On September 29, 1982, the Air Force Systems Command was directed to structure a competitive acquisition strategy for leasing up to 120 six to eight passenger business jets or a mix of jet/turboprop aircraft. The purpose was to replace aging CT-39 operational support aircraft with unmodified, commercially available, business aircraft. The cost was to be no more than operating and maintaining the existing CT-39 fleet. We pointed out in a report dated November 22, 1982 (GAO/PLRD-83-18), that the Air Force (1) did not establish that the entire CT-39 fleet had to be replaced in 1983, (2) had insufficient data available to verify lease cost projections, and (3) did not compare the cost of leasing versus buying the aircraft.

--On March 30, 1983, the Air Force issued an RFP for the lease of 80 jet and 40 jet/turboprop utility aircraft. Proposals were received from Beech, Cessna, Fairchild, Gates Learjet, Gulfstream, and Piper. The Source Selection Board met from May 16, 1983, through September 6, 1983. On September 19, 1983, the Secretary of the Air Force awarded Beech the lease for 40 C-12F turboprops and Gates Learjet the lease for 80 turbofans.

--On April 30, 1983, the Army ordered six C-12Ds at a cost of $1,665,528 per aircraft and the Air Force ordered six C-12Ds at a cost of $1,704,932. The $39,404 price difference between the Army and the Air Force purchases was due to delivery dates and added options. There are significant differences between the Army, Air Force, and Navy C-12 aircraft. As an example, the Army's C-12D aircraft uses a PT-41 engine whereas the Air Force's C-12As use PT-38 engines. In addition, the Army version has several configuration changes such as a cargo door, high flotation gear, and increased wing strength, that the Air Force's version does not have.

--On September 21, 1984, the Army contracted for six C-12D aircraft at a cost of $1,947,833 per aircraft and the Air Force contracted for six C-12F aircraft at a cost of $1,966,092. The $18,269 difference in cost was attributed primarily to the upgraded avionics package in the Air Force C-12Fs.

--On November 15, 1984, the Air Force notified the House Committee on Appropriations that it intended to exercise follow-on contract options with Gates Learjet and Beech for the lease and support of an additional 10 C-21A jets and 5 C-12F turboprop aircraft. On December 13, 1984, the Chairman, Subcommittee on Defense of the Senate Committee on Appropriations told the Air Force not to exercise the option. The Committee asked the Department of Defense to "... study the requirement for operational support aircraft in both the active and reserve components to identify wartime and peacetime operational requirements of the reserve components." The Chairman also stated that the fleet of 120 operational support aircraft previously approved is capable of supporting a 40 tactical fighter wing force--a level not programmed to be reached until at least the early 1990s.

--In late 1985 or early 1986 the Military Airlift Command is to study the options needed to continue the 80 C-21 and C-12 aircraft capabilities after the 5-year lease expires. The options include (1) continue the lease, (2) buy the leased aircraft, or (3) recompete. To preserve

available options, the fiscal year 1986 budget has programmed funds to buy the leased aircraft.

APPENDIX III

SELECTED C-12 MODIFICATIONS[a]

Number	Date	Description of change	Cost
20,29,33	8/12, 9/17 and 9/19/75	Installed wing fuel tanks in 23 aircraft prior to delivery.	$ 115,368
68	6/24/76	Installed extended frequency range VHF radios in 19 aircraft.	43,585
89	11/17/76	Rearranged cabin for 11 aircraft, latrine relocation/modification, and replacement of eight approved C-12A seats with five U-21F seats and one deluxe two passenger bench seat thus, reducing passenger seating capacity from eight to seven.	68,200
125	6/29/77	Installed UHF radio kits in 10 production and 21 retrofit aircraft and VHF radios in 20 retrofit aircraft.	503,554
160	3/6/78	Changed PT6A-38 engines to PT6A-41 engines on 20 aircraft prior to delivery by Beech.	1,009,120
168	4/4/78	Added propeller autofeather with synchrophaser during production of 19 aircraft.	75,300
171	4/26/78	Incorporated main landing gear brake de-icer system on 19 aircraft.	59,900
186	9/25/78	Modified 22 Navy aircraft prior to delivery.	2,826,197

Number	Date	Description of change	Cost
		Examples of changes were: --Installed PT6A-41 versus PT6A-38 engines. --Installed propeller auto-feather synchrophaser. --Added high flotation landing gear, cargo door, and refresher cabinet. --Upgraded avionics package.	
231	6/9/77	Purchased 60 main landing gear brake de-icer systems for retrofit.	108,069
285	7/22/80	Retrofit package for 67 C-12 aircraft for wing tip recognition lights.	40,860
334	12/10/81	Procured 99 C-12 wing bolt kits.	72,497

[a]There have been 376 modifications to this contract, totaling approximately $165,033,875 through May 31, 1985. Included in this figure are procurement costs such as modification number 3 for 100 Army aircraft and modifications covering procurement costs for 66 Navy UC-12Bs.

COMPARISON OF C-12 TYPE AIRCRAFT[a]

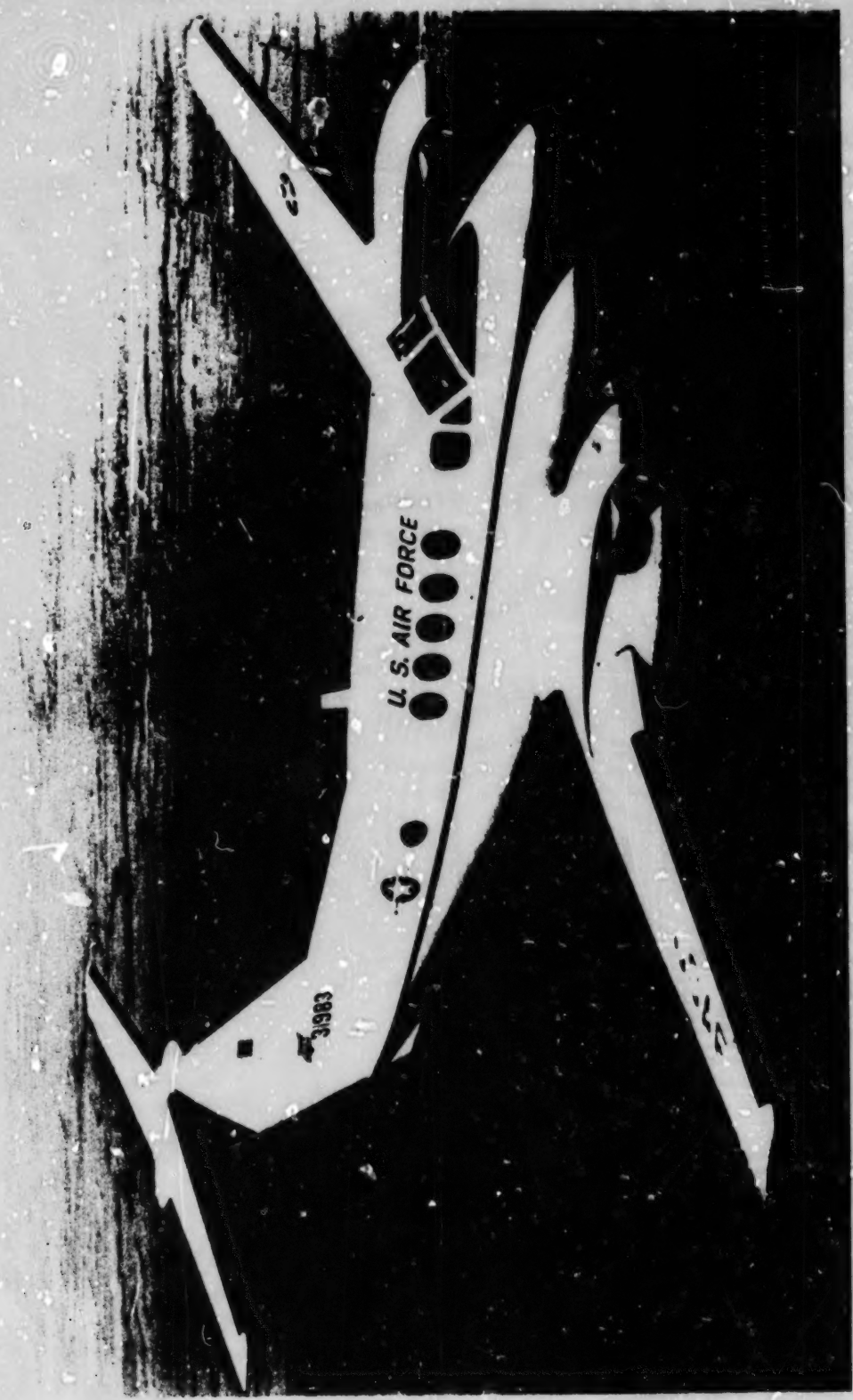
Company aircraft	No. of seats including crew	Maximum gross wt. pounds	Horse Power	Normal cruise speed MPH	Maximum range 45 minute reserve (miles)	Takeoff length (feet)	Landing length (feet)	Price
Beech B200 Super King Air (C-12D)	8-15	12,500	1,700	321	2,272	3,345	2,845	$2,078,000
Cessna 441 Conquest II[b]	8-10	9,925	1,271	330	2,636	2,465	1,875	1,795,000
Fairchild Merlin 300[b]	8-10	13,230	1,800	340	2,508	2,920	2,805	1,970,000
Fairchild Merlin 4C	1-16	14,500	2,200	327	2,297	3,200	2,715	2,450,000
Piper Cheyenne 3A	8-11	11,200	1,440	351	2,612	2,280	2,586	1,995,000
Piper Cheyenne 400LS[b]	9	12,050	2,000	404	2,504	2,232	2,340	2,375,000

[a]Aviation Week and Space Technology, March 18, 1985.

[b]A proposal including this aircraft was not submitted in the 1983 Air Force competition.

APPENDIX IV

APPENDIX V



THE BEECHCRAFT C-12

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APPENDIX VI

JOHN TOWER, TEX., CHAIRMAN

STROM THURMOND, S.C.
BARRY GOLDWATER, ARIZ.
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WILLIAM S. COHEN, MAINE
ROGER W. JEPSEN, IOWA
DAN QUAYLE, IND.
JOHN P. EAST, N.C.
PETE WILSON, CALIF.

SAM NUNN, GA.
JOHN C. STENNIS, MISS.
GARY HART, COLO.
J. JAMES EXON, NEBR.
CARL LEVIN, MICH.
EDWARD M. KENNEDY, MASS.
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JAMES F. McGOVERN, STAFF DIRECTOR AND CHIEF COUNSEL
ARNOLD L. PUNARO, STAFF DIRECTOR FOR THE MINORITY

United States Senate

COMMITTEE ON ARMED SERVICES
WASHINGTON, D.C. 20510

February 1, 1985

Mr. Charles A. Bowsher
Comptroller General of the United States
General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Bowsher:

For some time I have been concerned about the method of procurement of C-12 aircraft for use by the military. It is a matter of concern to me that year after year unrequested C-12 aircraft are added to the defense budget by the Congress for procurement without the benefits of competition.

I would like the General Accounting Office to conduct a review of the acquisition strategy of the C-12 beginning in 1974. In those instances in which the C-12 was selected competitively, I request you review the bid proposals of other manufacturers to determine that, in each case, the winner was properly selected. In those instances where the aircraft were procured without the benefit of competition, I ask you to determine whether there was sufficient justification and rationale for a sole source procurement.

One argument that is frequently made by those who favor sole source procurement of the C-12, is that the procurement of a different aircraft would require the establishment of an entirely separate logistics base. It is my understanding that recent competitive proposals from other aircraft manufacturers have included a cost-per flight hour guarantee (which includes support services) that would eliminate any requirement for a separate logistics establishment. Please determine whether such an establishment would be required to maintain a new aircraft other than the C-12.

Finally, I would like you to look at future requirements for the Department of Defense for C-12 type aircraft. Please evaluate the projected mission requirement and identify those aircraft which are available and could meet those requirements. If savings appear to be indicated, please identify the opportunities for competition.

I request that you provide your report to me no later than May 15, 1985.

With best wishes,

Barry Goldwater
Chairman

(392123)